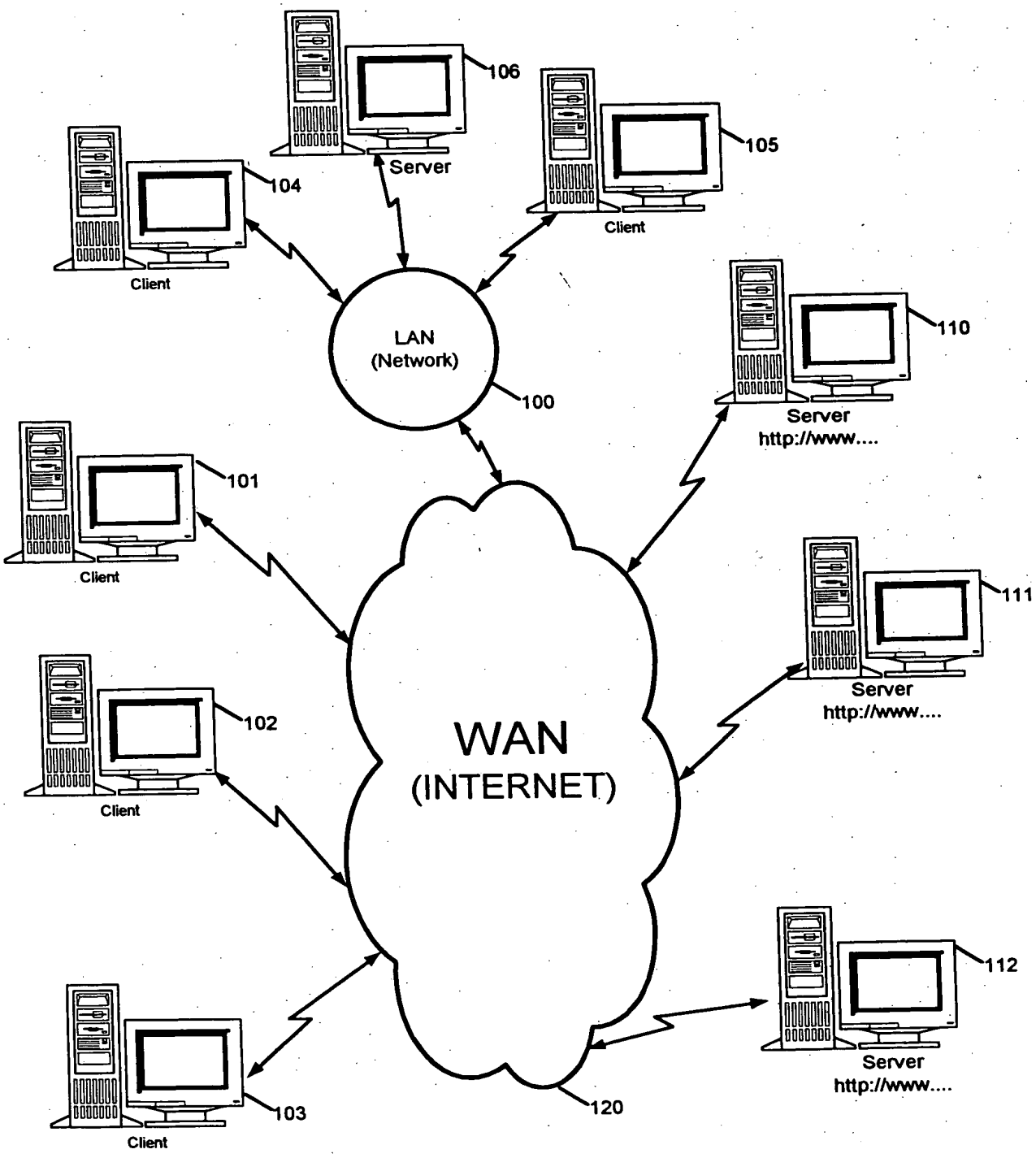

106
Server
105
Client
104
Client
LAN
(Network)
100
110
Server
http://www....
101
Client
111
Server
http://www....
WAN
(INTERNET)
102
Client
112
Server
http://www....
103
Client
120

FIG. 1

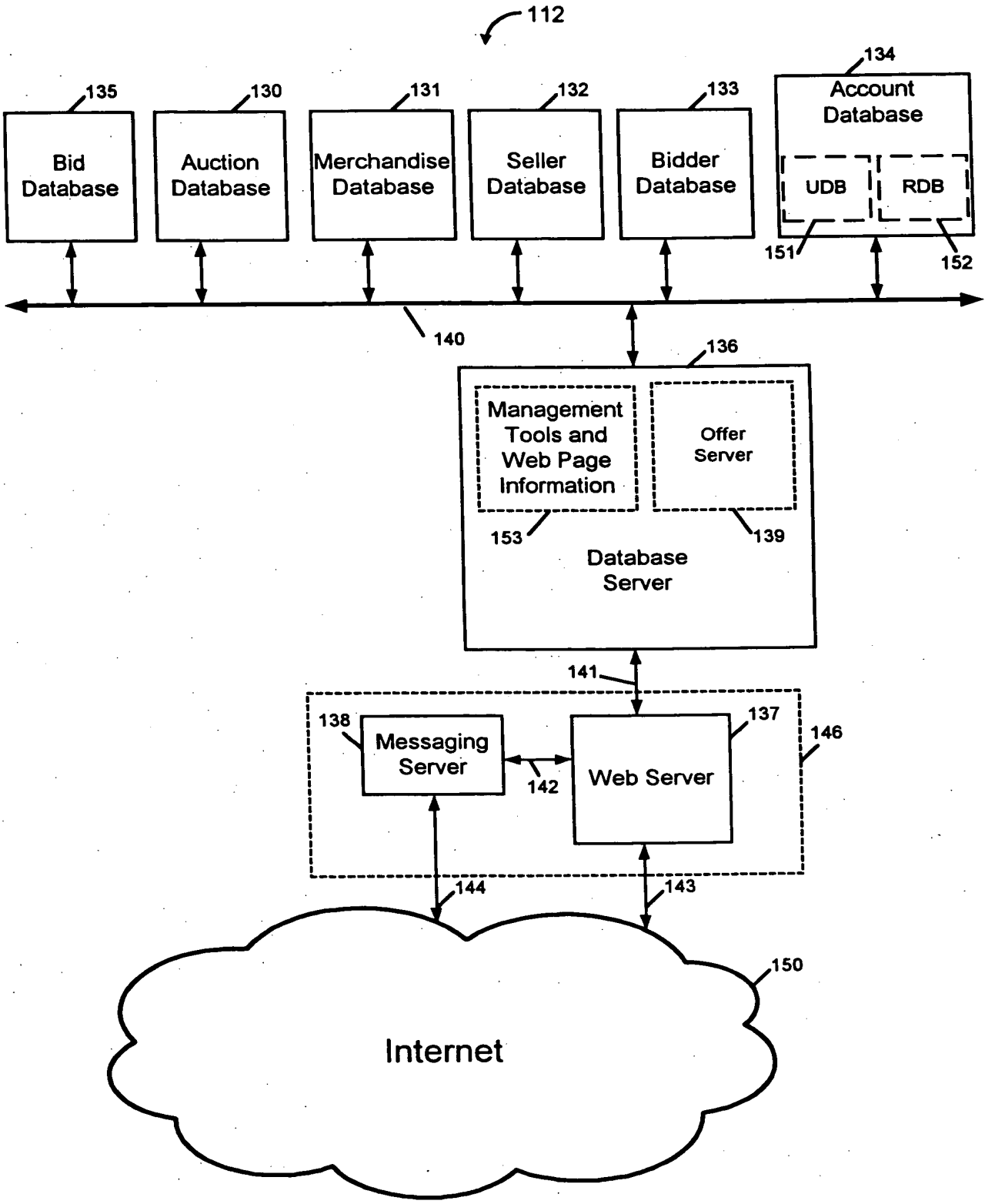
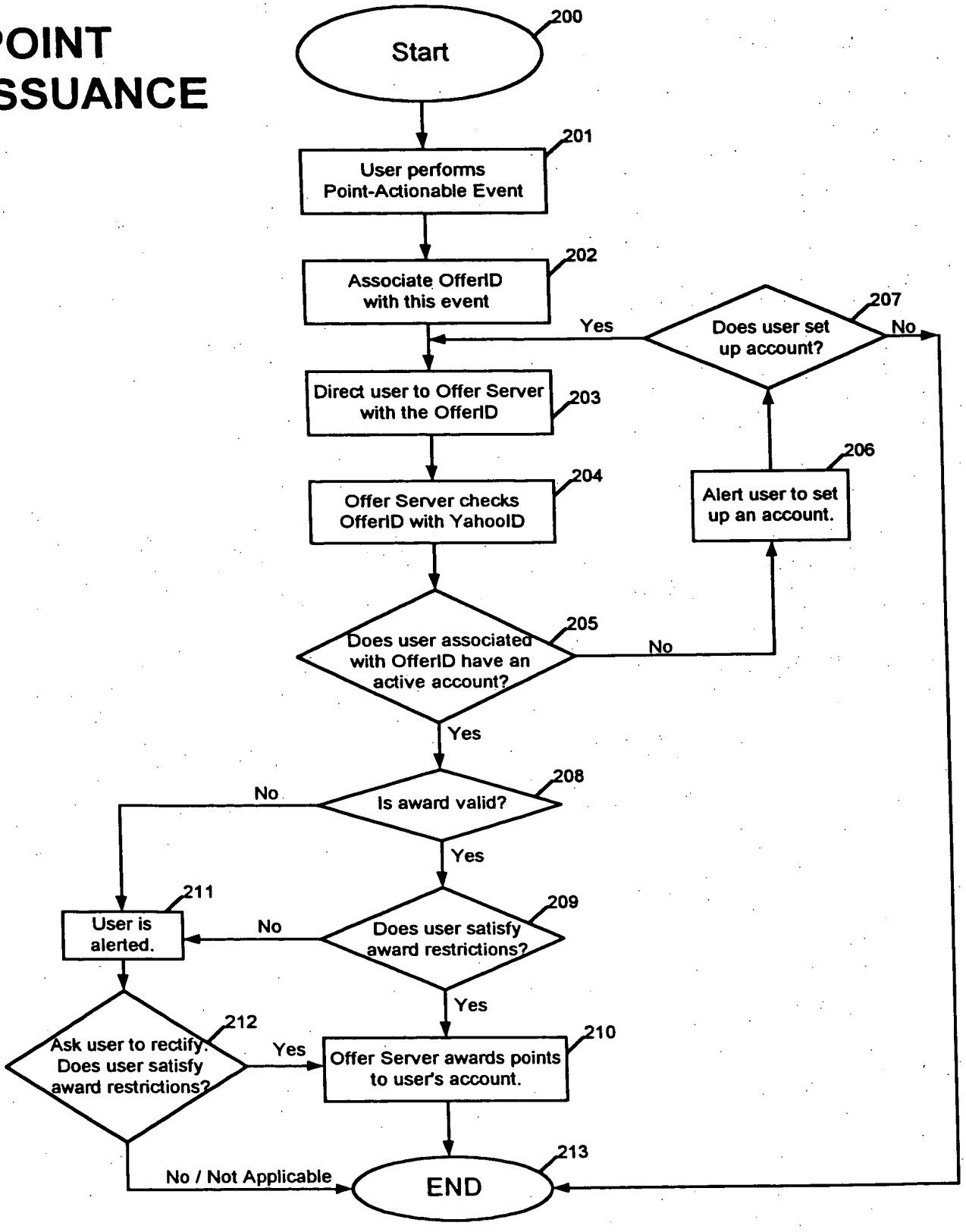

112
135
Bid Database
130
Auction Database
131
Merchandise Database
132
Seller Database
133
Bidder Database
134
Account Database
UDB
RDB
151
152
140
136
Management Tools and Web Page Information
Offer Server
153
139
Database Server
141
138
Messaging Server
142
Web Server
137
146
144
143
150
Internet

FIG. 2

POINT ISSUANCE



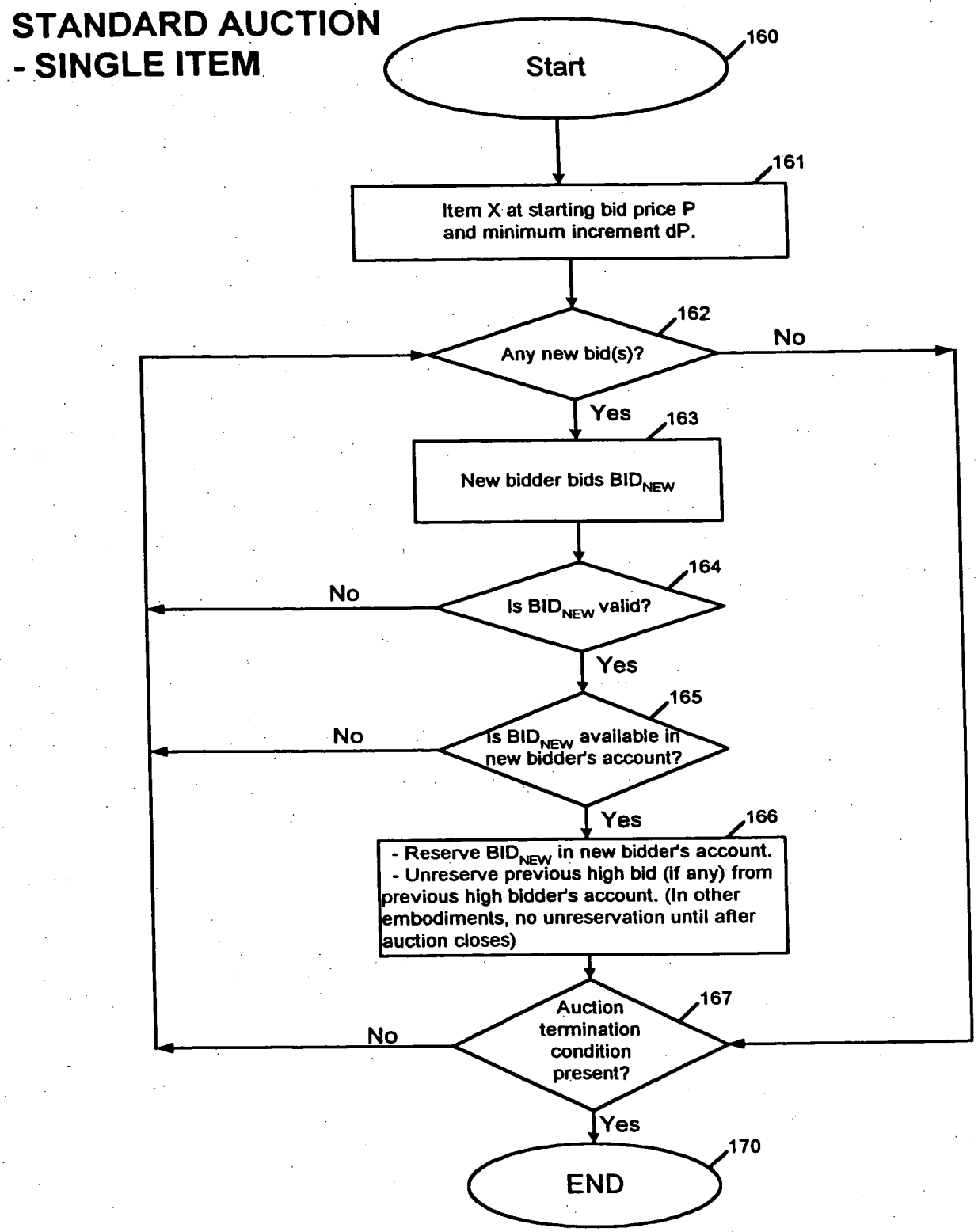

STANDARD AUCTION
- SINGLE ITEM
Start
160
Item X at starting bid price P
and minimum increment dP.
161
Any new bid(s)?
162
No
Yes
New bidder bids BID_NEW
163
Is BID_NEW valid?
164
No
Yes
Is BID_NEW available in
new bidder's account?
165
No
Yes
- Reserve BID_NEW in new bidder's account.
- Unreserve previous high bid (if any) from
previous high bidder's account. (In other
embodiments, no unreservation until after
auction closes)
166
Auction
termination
condition
present?
167
No
Yes
END
170

FIG. 4

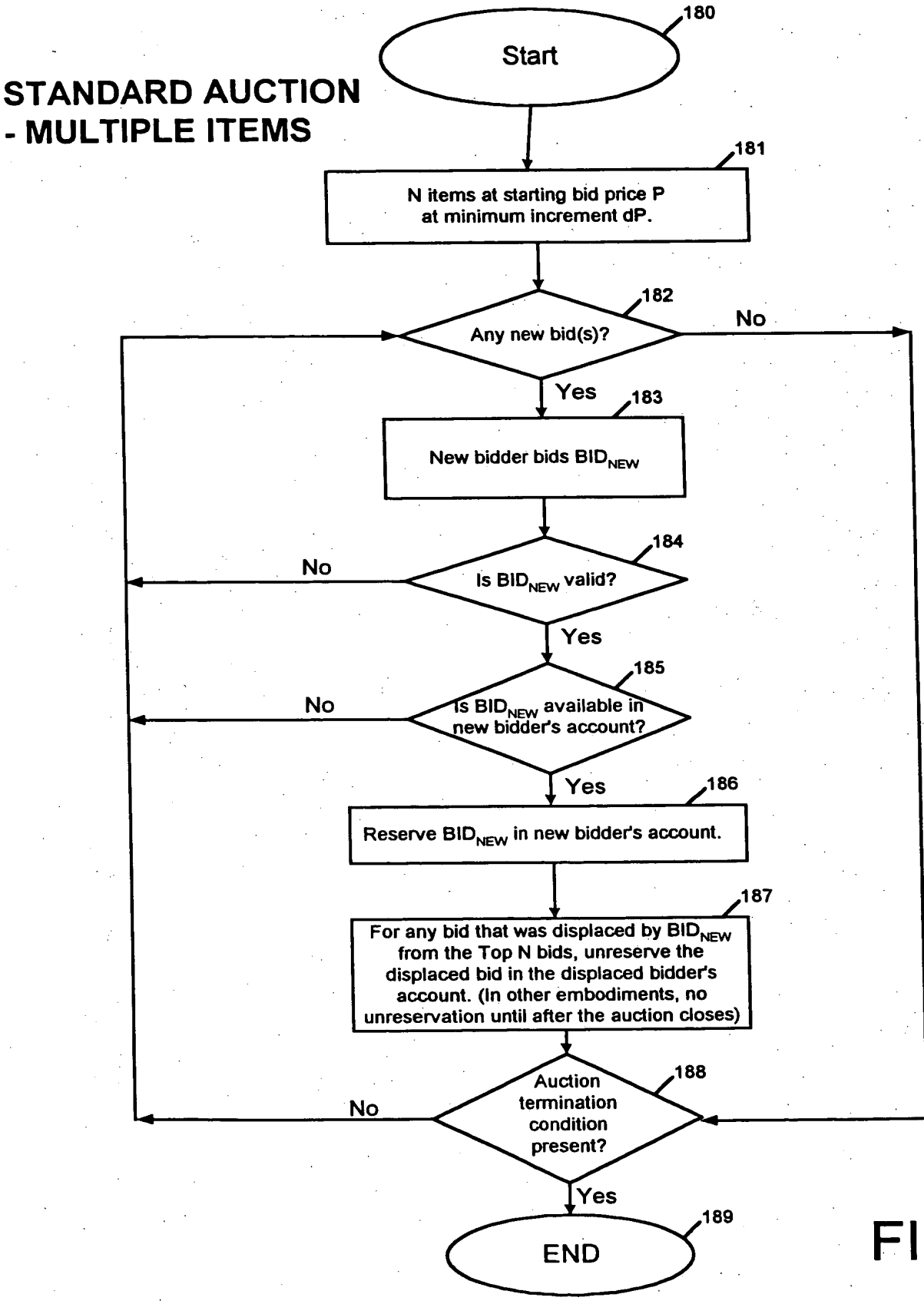

STANDARD AUCTION
- MULTIPLE ITEMS
Start
180
N items at starting bid price P
at minimum increment dP.
181
Any new bid(s)?
182
No
Yes
New bidder bids BID_NEW
183
Is BID_NEW valid?
184
No
Yes
Is BID_NEW available in new bidder's account?
185
No
Yes
Reserve BID_NEW in new bidder's account.
186
For any bid that was displaced by BID_NEW from the Top N bids, unreserve the displaced bid in the displaced bidder's account. (In other embodiments, no unreservation until after the auction closes)
187
Auction termination condition present?
188
No
Yes
END
189

FIG. 5

DUTCH AUCTION
FIRST EMBODIMENT

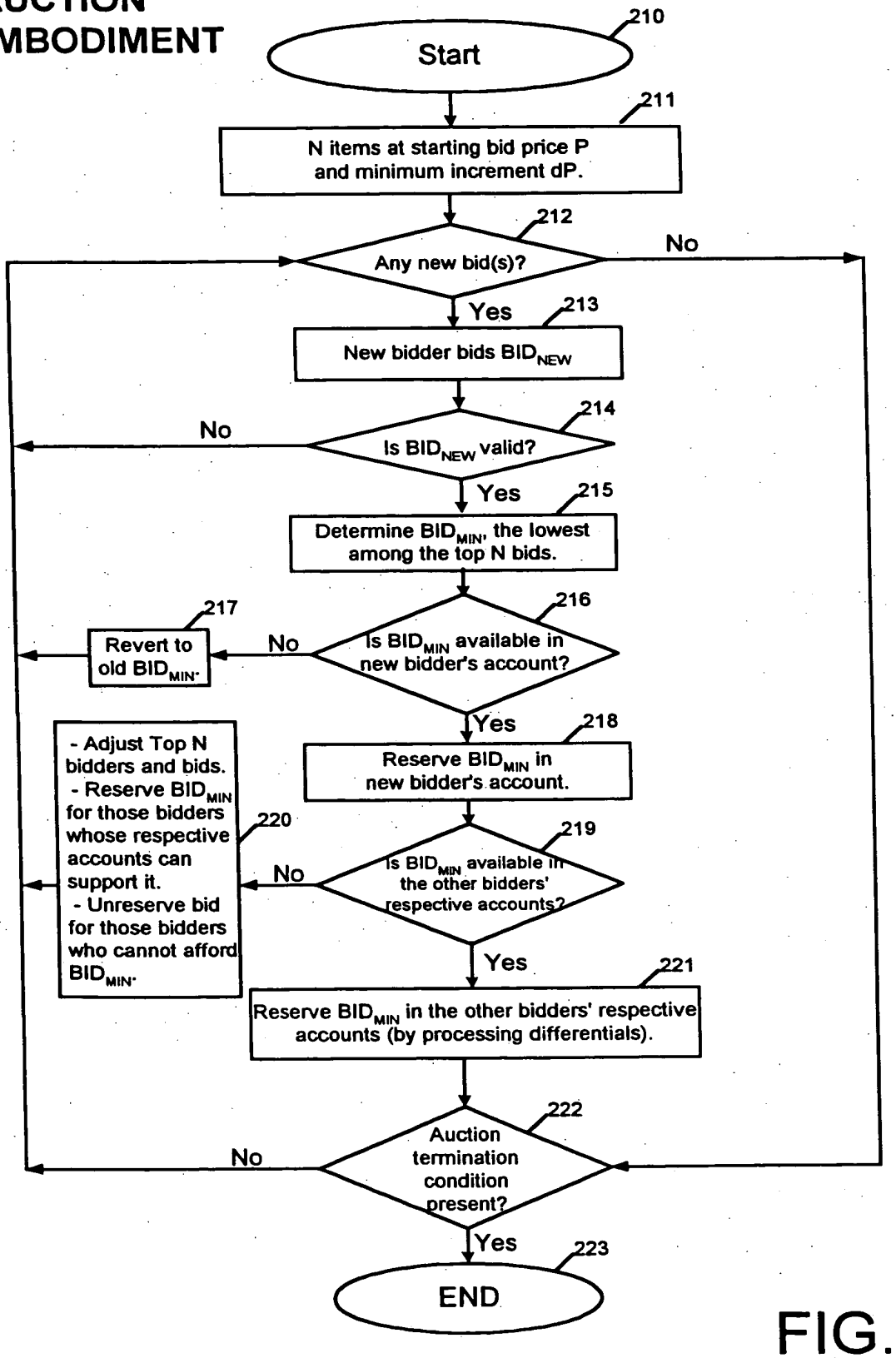


FIG. 6

DUTCH AUCTION
- SECOND EMBODIMENT

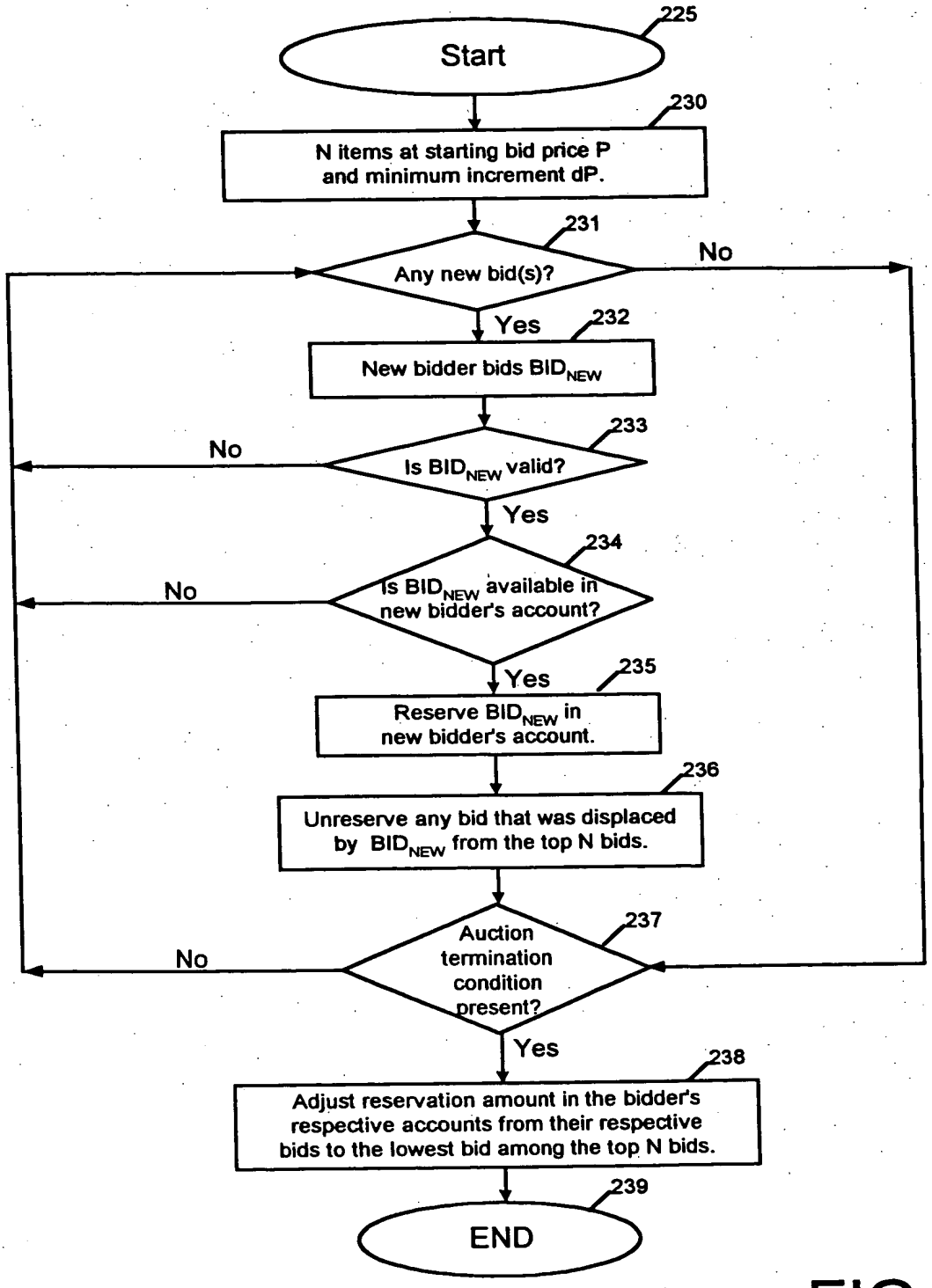


FIG. 7

PROGRESSIVE AUCTION

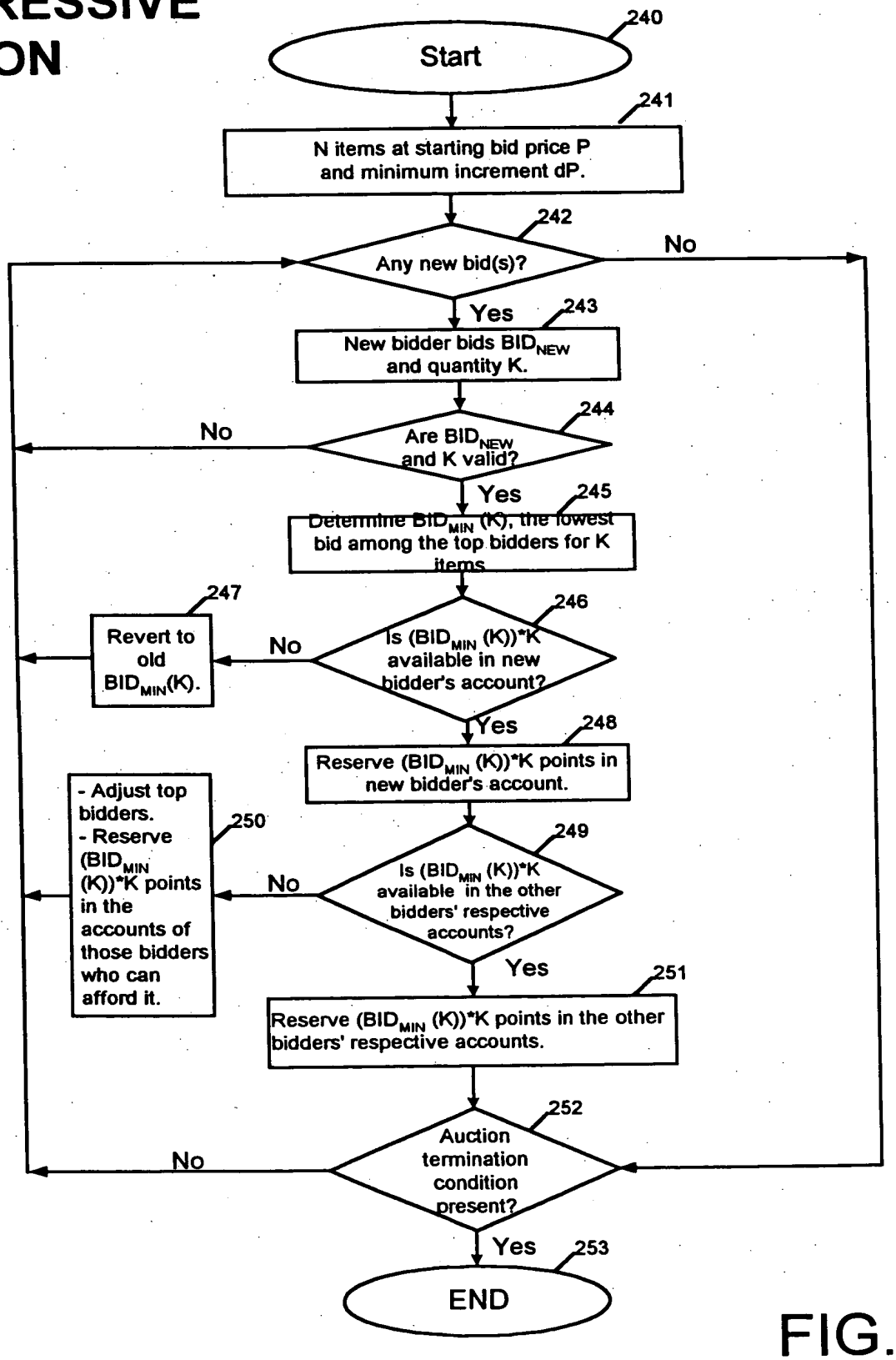


FIG. 8

BUY OR BID AUCTION

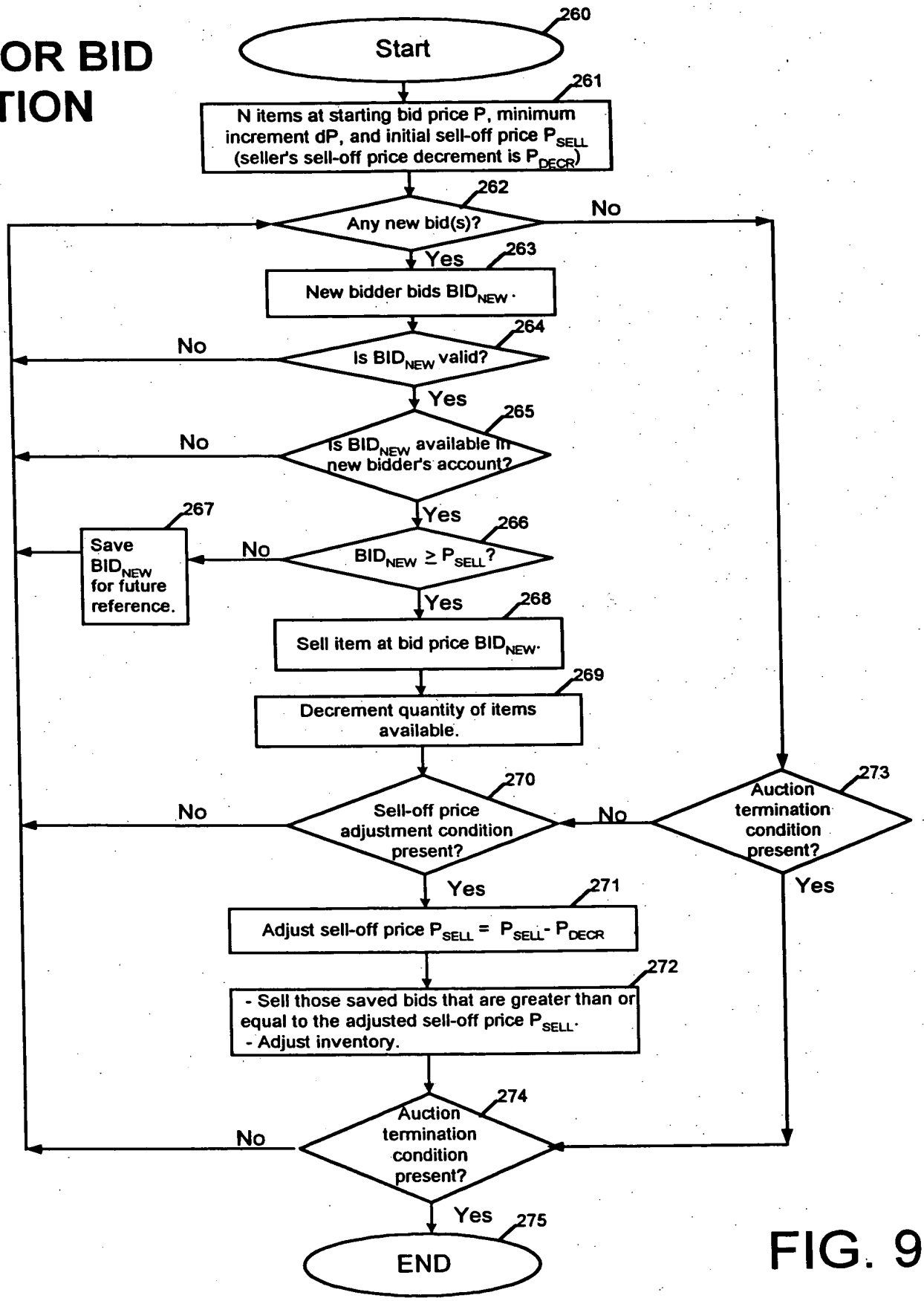


FIG. 9

AUTOMATED BIDDER

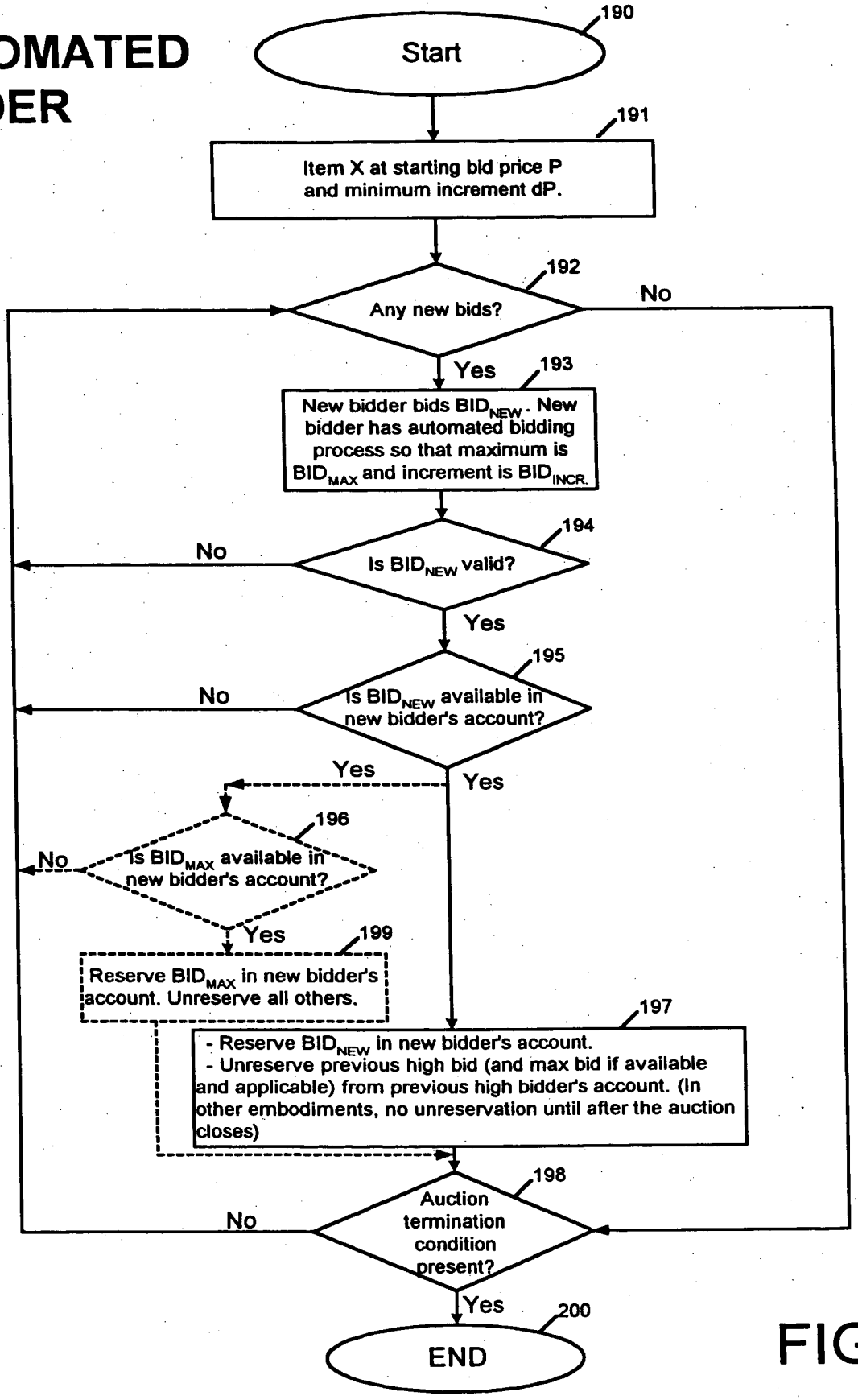


FIG. 10

DECLINING BID AUCTION

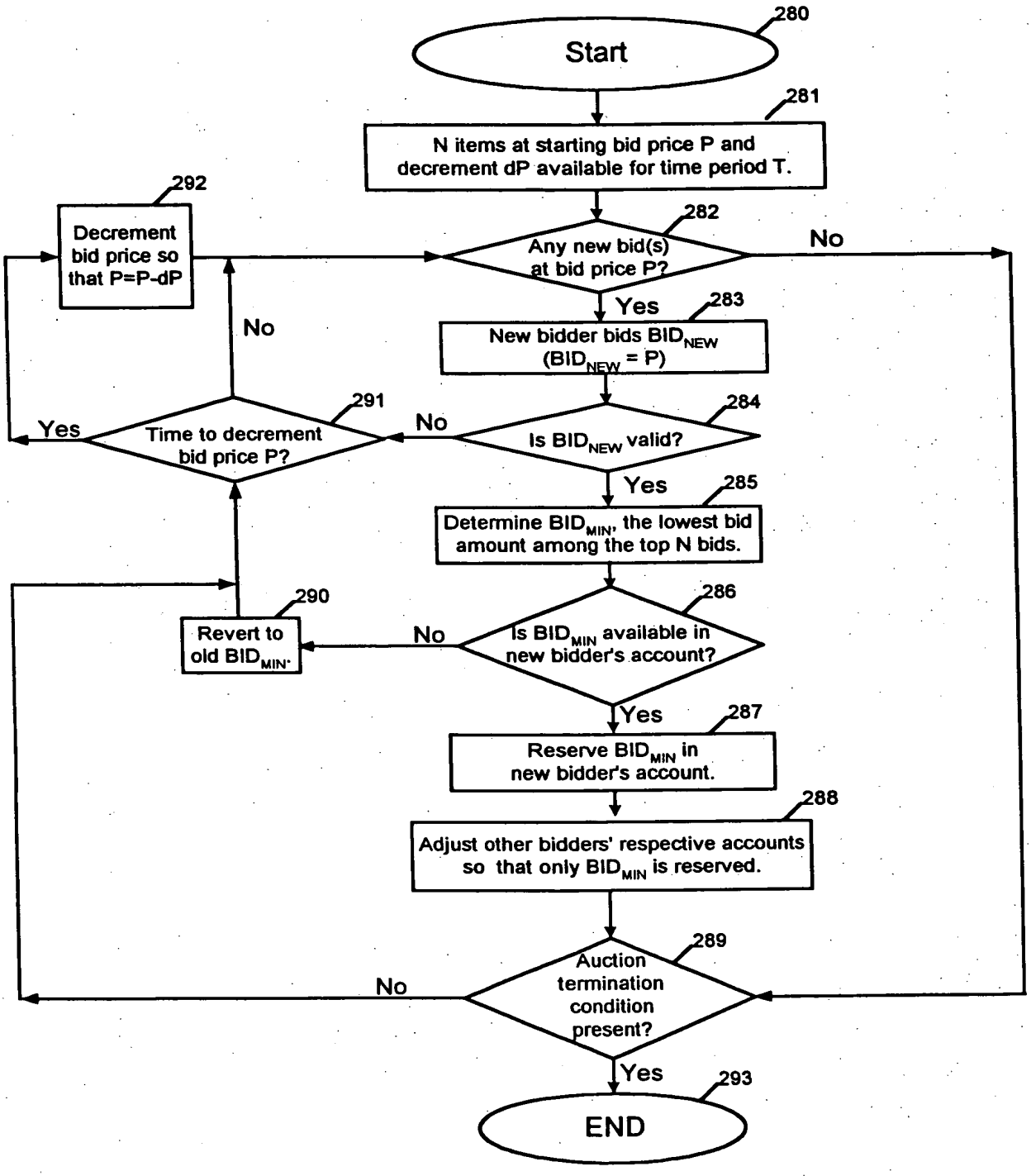


FIG. 11

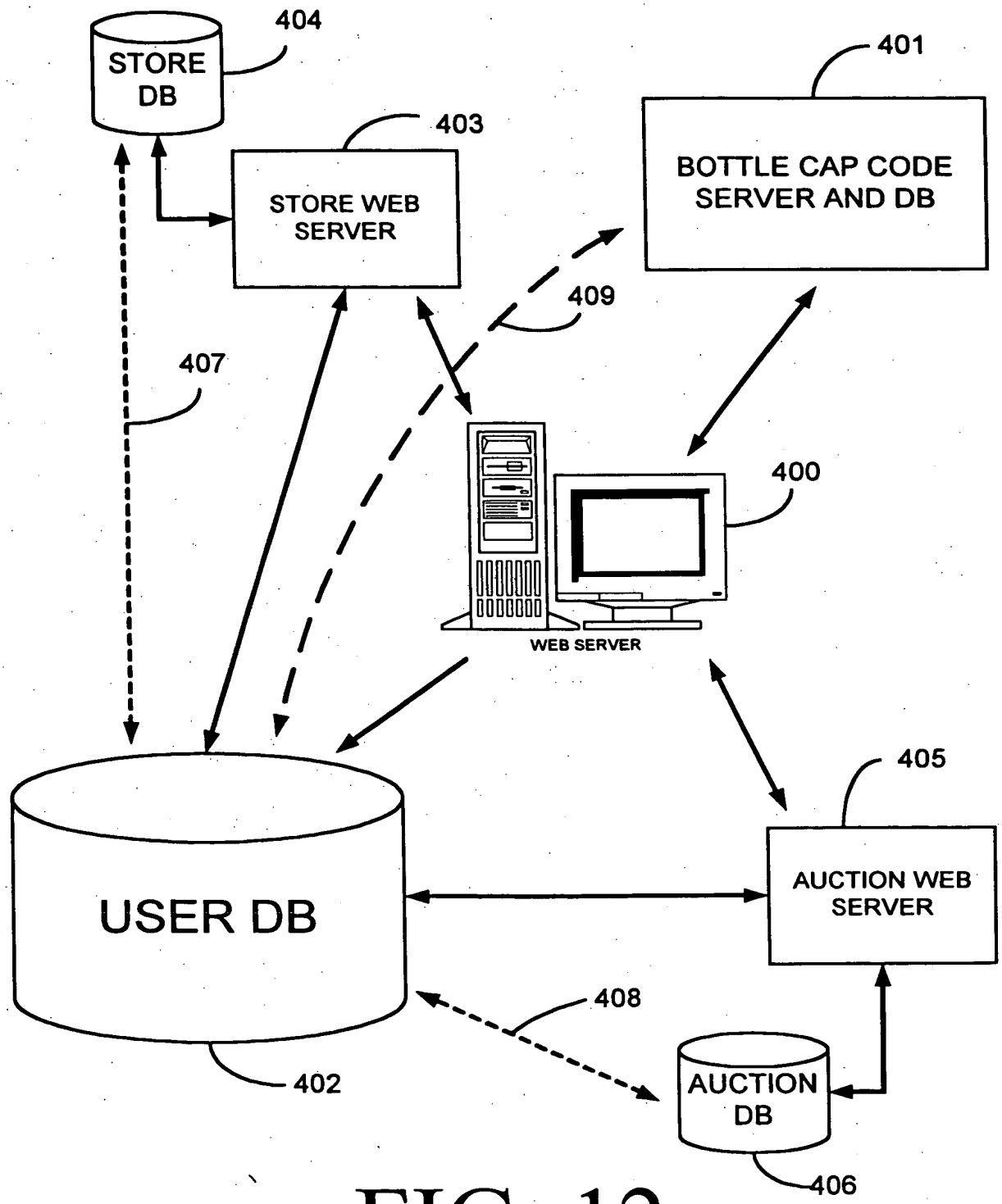

404
STORE DB
401
BOTTLE CAP CODE SERVER AND DB
403
STORE WEB SERVER
409
407
400
WEB SERVER
405
AUCTION WEB SERVER
USER DB
408
AUCTION DB
402
406

FIG. 12

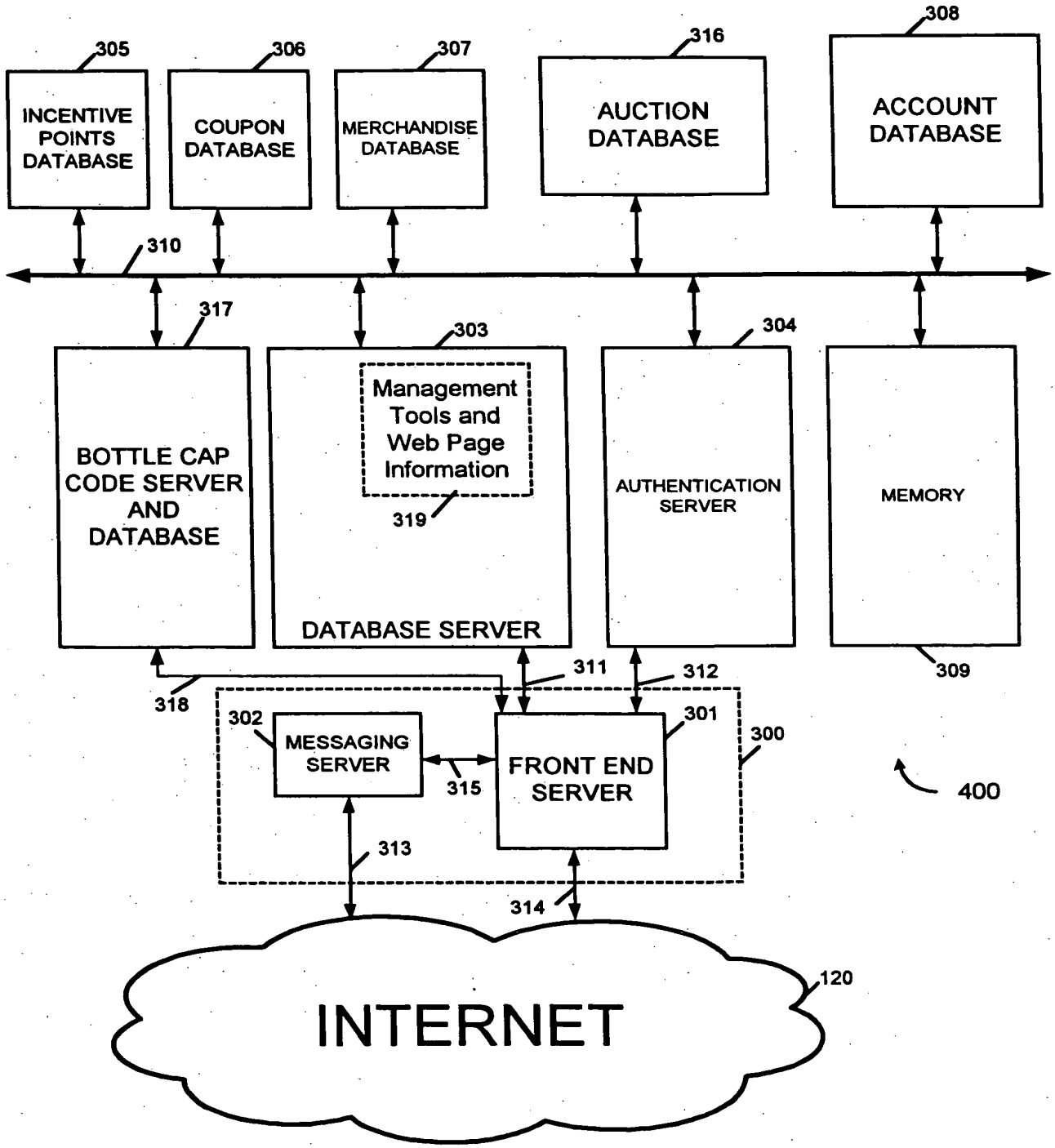

305
INCENTIVE POINTS DATABASE
306
COUPON DATABASE
307
MERCHANDISE DATABASE
316
AUCTION DATABASE
308
ACCOUNT DATABASE
310
317
BOTTLE CAP CODE SERVER AND DATABASE
303
Management Tools and Web Page Information
319
DATABASE SERVER
304
AUTHENTICATION SERVER
MEMORY
309
318
311
312
302
MESSAGING SERVER
315
301
FRONT END SERVER
300
400
313
314
120
INTERNET

FIG. 13

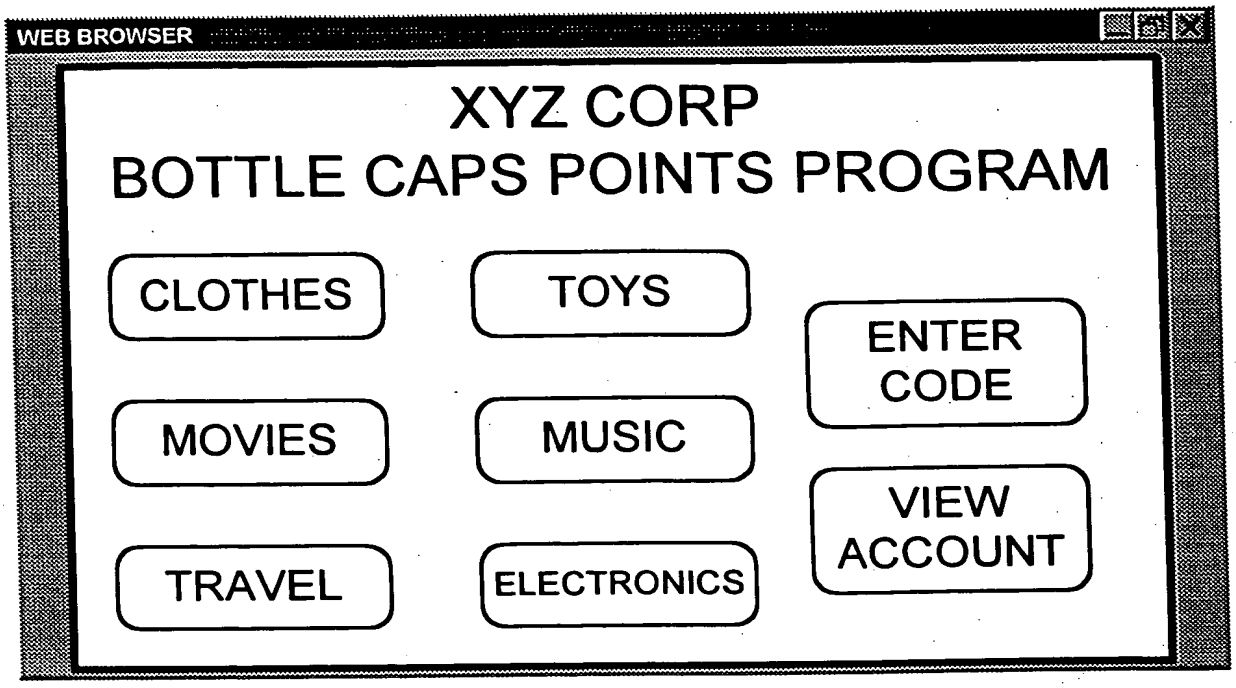


FIG. 14(A)

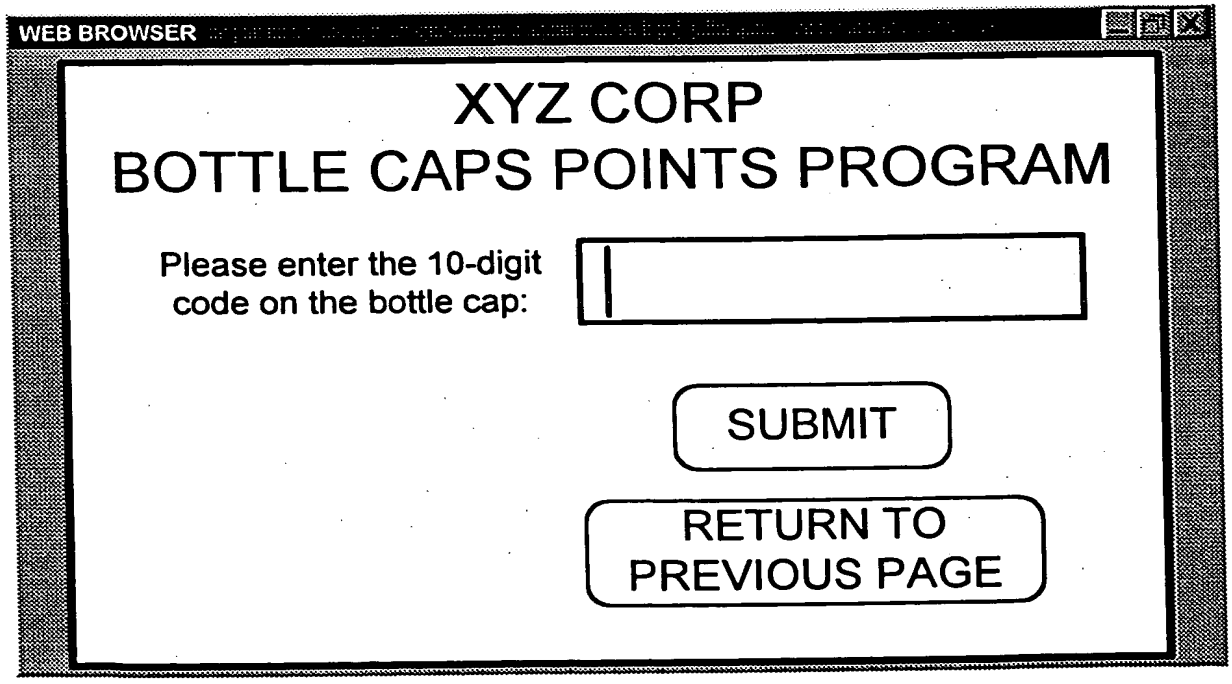


FIG. 14(B)

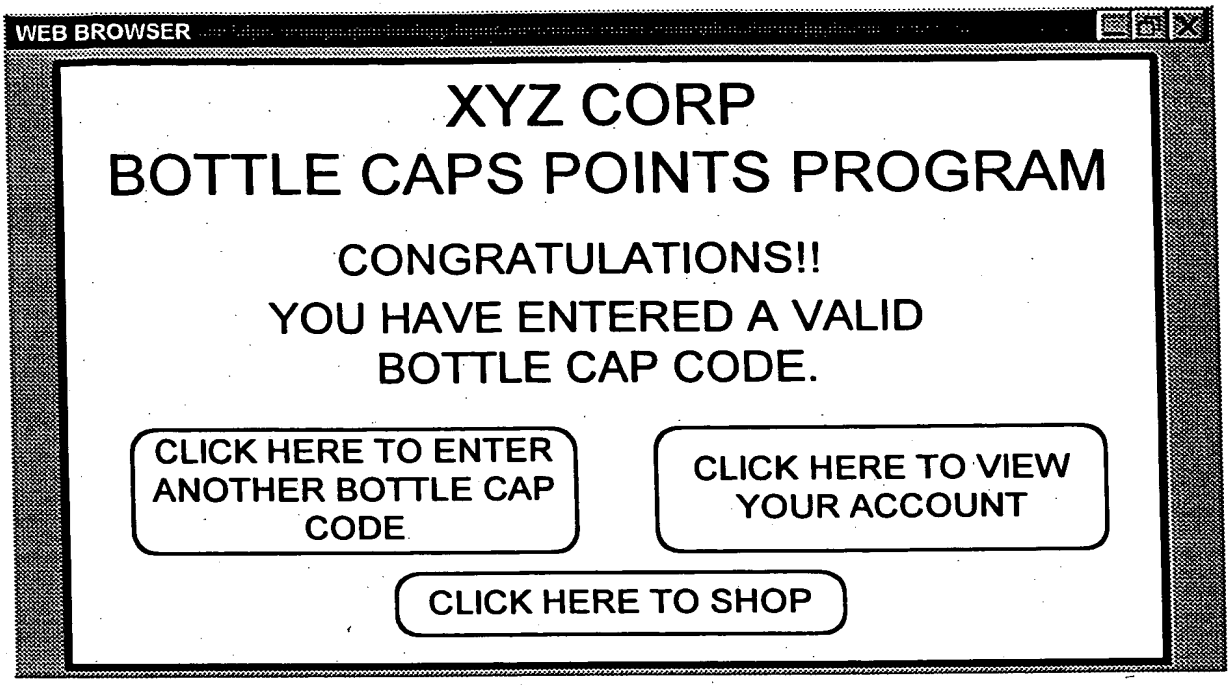


FIG. 14(C)

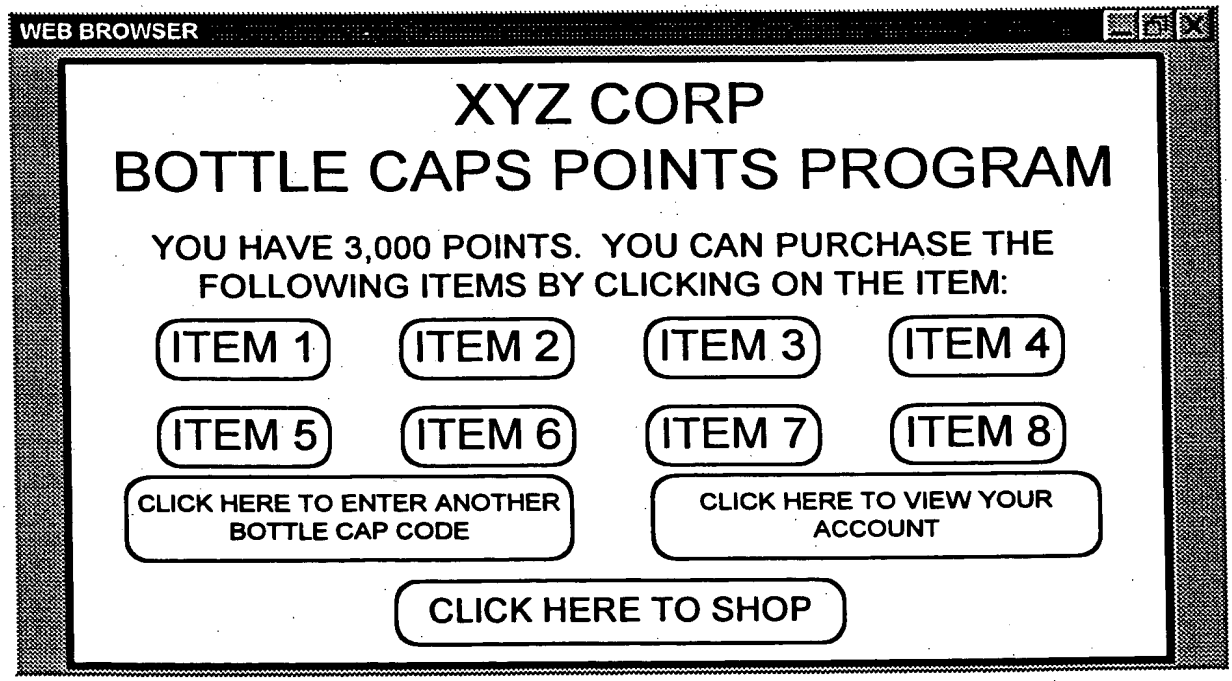


FIG. 14(D)

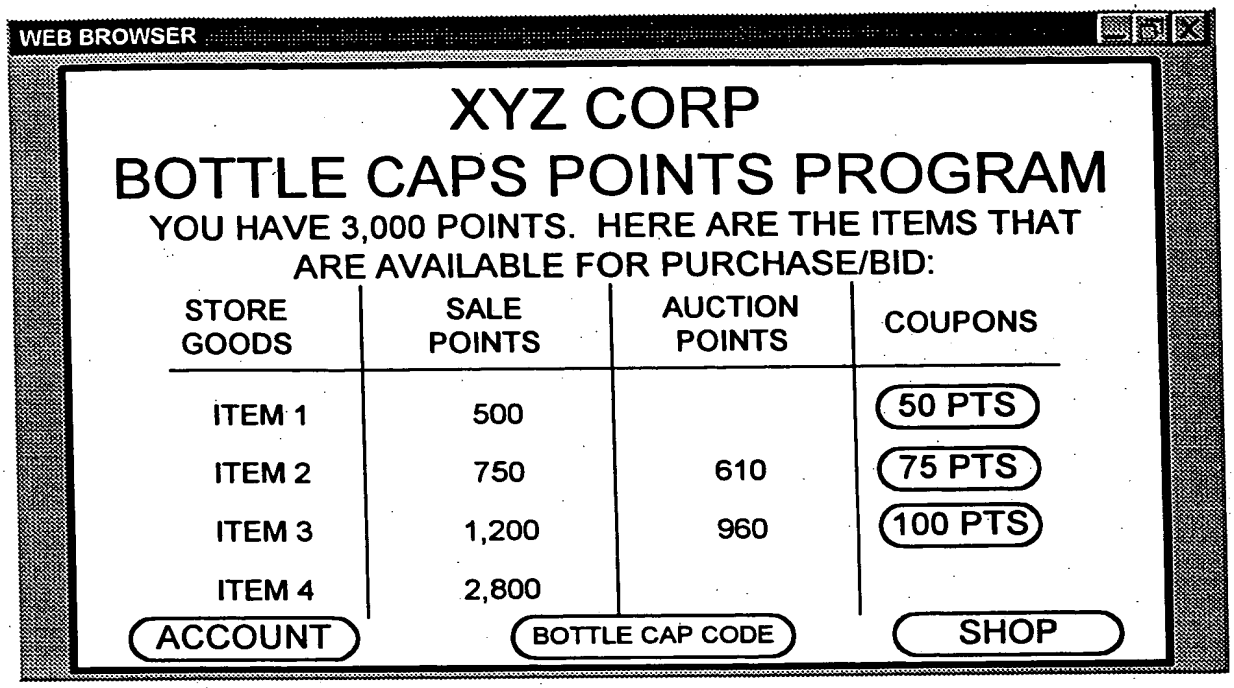

WEB BROWSER
XYZ CORP
BOTTLE CAPS POINTS PROGRAM
YOU HAVE 3,000 POINTS. HERE ARE THE ITEMS THAT ARE AVAILABLE FOR PURCHASE/BID:
STORE GOODS
SALE POINTS
AUCTION POINTS
COUPONS
ITEM 1
500
50 PTS
ITEM 2
750
610
75 PTS
ITEM 3
1,200
960
100 PTS
ITEM 4
2,800
ACCOUNT
BOTTLE CAP CODE
SHOP

FIG. 14(E)

ENCRYPTION

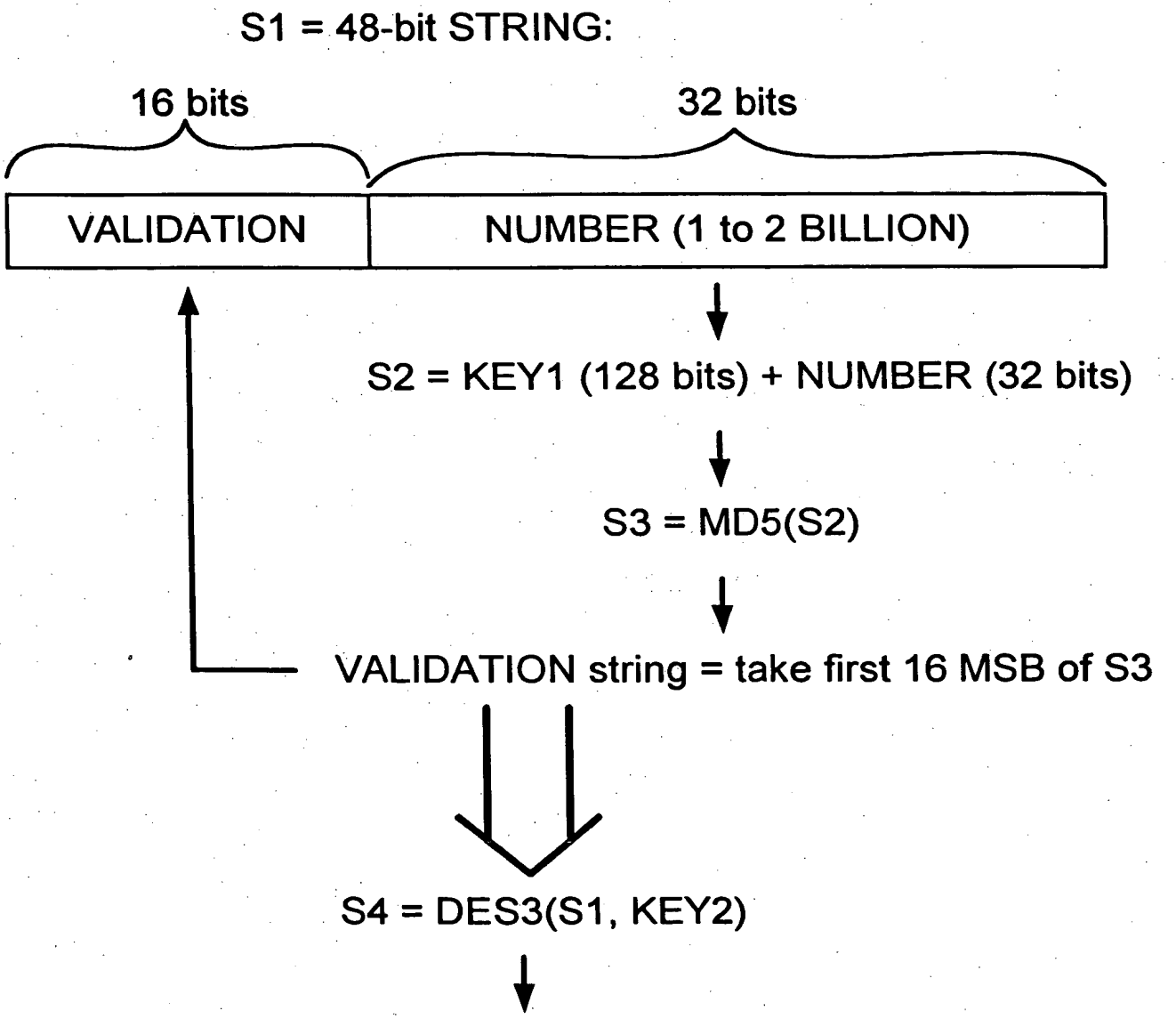


FIG. 15

VERIFICATION

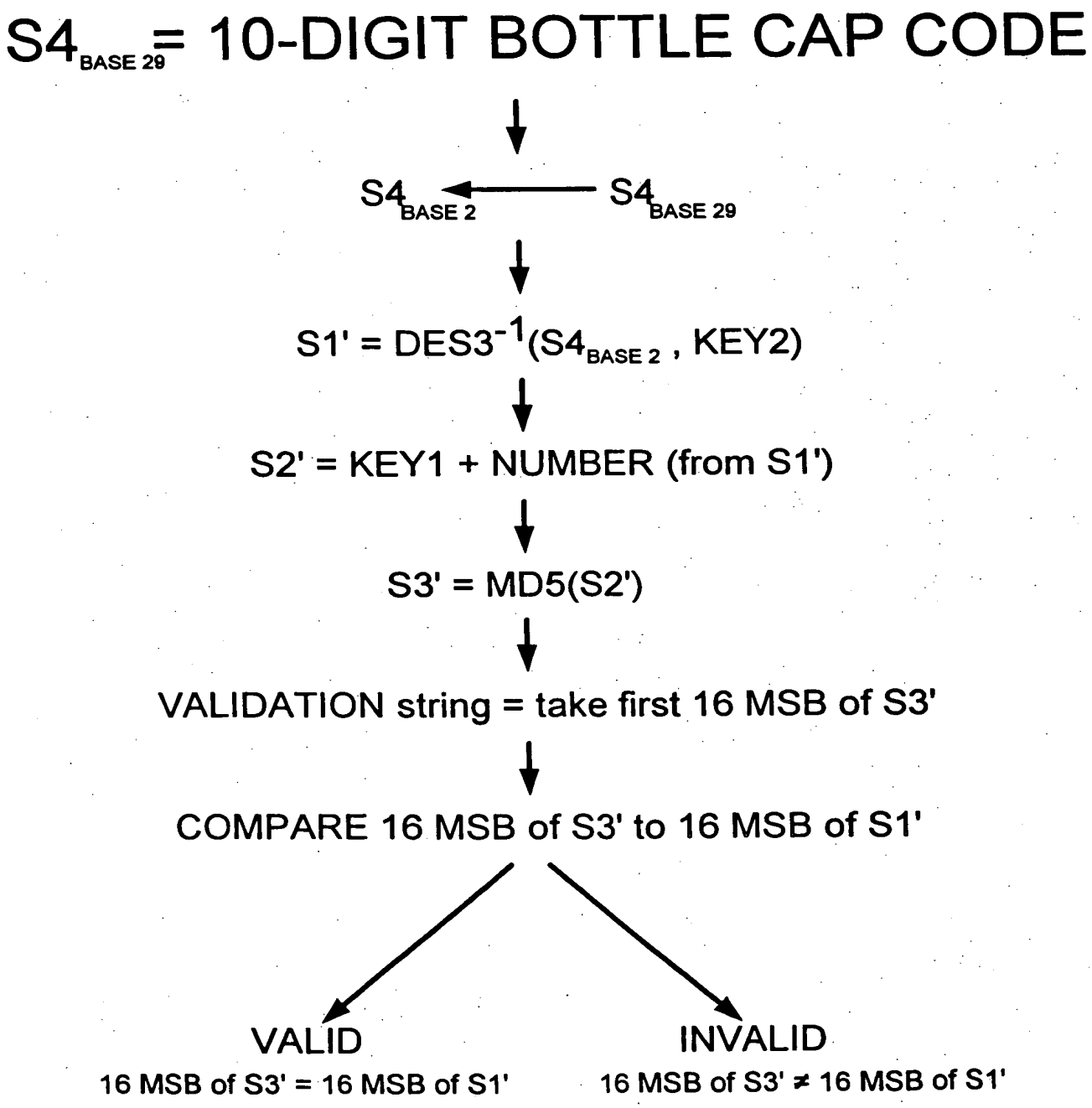


FIG. 16

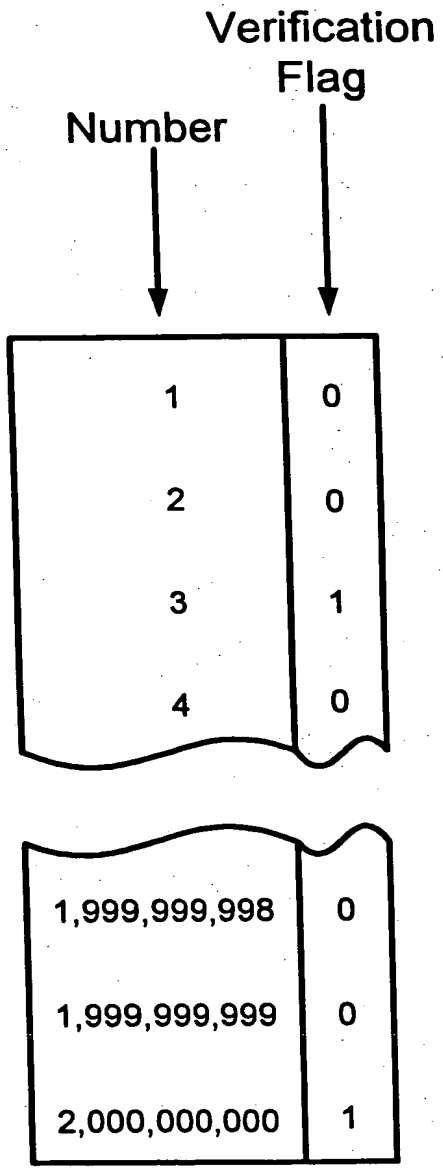

Verification Flag
Number
1
0
2
0
3
1
4
0
1,999,999,998
0
1,999,999,999
0
2,000,000,000
1

FIG. 17